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GENERAL STAFF.

No. 9.

ACTUAL EXPERIENCES IN WAR:

*Battle Action of the Infantry;
Impressions of a Company Commander.*

By

Capt. L. Z. SOLOVIEV,

Thirty-fourth East Siberian Rifle Regiment.

—
July, 1906.
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GENERAL STAFF PREFACE.

The following account of a Russian officer's experience during the recent war in Manchuria has been translated for the Army War College from a pamphlet published at St. Petersburg by the Society of Military Science.

The author, Capt. L. Z. Soloviev, Thirty-fourth East Siberian Rifles, has shown such keen and appreciative observation in his description of great battles as seen from a company commander's point of view, and his remarks cover so many mooted questions in regard to the battle tactics of to-day that the little work has been deemed worthy of publication in English for distribution to the Army.

A company in an East Siberian rifle regiment and in general in an infantry regiment of the line, on a war footing, has a normal quota of 220 rifles. The company is habitually formed in two ranks; is divided into the first and second half-companies, which are subdivided, respectively, into the first and second and the third and fourth sections. A section is further subdivided into four squads, numbered from 1 to 4 in each section. When a section consists of less than 16 files it would be divided into two squads only. It was impossible to keep the ranks full in practice, and in the advance of September-October, 1904, south of Mukden, there were companies mustering only 60 to 80 bayonets.

The Russian pace when used as a standard of measure is equivalent to one arshin=28 inches, 3 paces=1 sazhen=7 feet, and 1,500 paces=500 sazhens=1 verst=1.06 kilometers=1,161.6 yards.

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ACTUAL EXPERIENCES IN WAR:

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Before starting to write the present report, I must state that I can not give a full description or picture of any one battle or give an analysis of operations of large units in the theater of war, but can only share with my readers the impressions and observations which I gleaned personally, or heard from immediate participants in combat.

Unfortunately I remained but a short time at the theater of military operations. My horizon, as commander of a company, could not be wide, and therefore I crave beforehand indulgence for the incompleteness and unconsecutiveness of my remarks. My observations deal mainly with the combat as a phase of military operations which, on account of its essential importance and absorbing interest, attracts the greatest attention.

THE COMBAT.

Justice requires me to state that the first engagement in which I took part showed me most emphatically that many a thing I had to do in battle was not what I had been taught, and that many a thing I was taught is not applicable in combat. I was also struck with the incongruity of many of the demands of our regulations as regards the exactions of combat.

I shall first touch upon the technical side of combat, such as presented itself to me during the present conditions of battle. My observations deal mostly with the infantry and partly with the artillery.

MOVEMENTS IN THE ZONE OF ARTILLERY FIRE.

In present-day battles the artillery strikes at a distance of 5 or 6 versts (5,833 to 7,000 yards). Artillery combat is generally taking place at such distances, and infantry units are hit only accidentally, but should large units be discovered at that range it is certain that Japanese artillery will not lose the opportunity and that the column will come under artillery fire, and very well-aimed fire at that. Even at such ranges the movements of the infantry must consequently be made as secretly as possible, as the Japanese have an excellent service of observation over the enemy. I saw personally how one of our transports, pushing peaceably through the mountains at least some 5 versts from the positions, was taken by a Japanese battery, the first shell of which burst quite close to the train and caused an alarm, as with the first shot the train troops began to run hither and thither and lose their heads. It is marvelous how the battery could have found out that train, which was noticed by us only when the Japanese battery began firing against it.

The movements of infantry at a distance of 5 to 3 versts (5,833 to 3,500 yards) are generally effected in marching columns by sections or by lines.

But already at 3 versts' (3,500 yards) range the fire of artillery grows effective and the shells tell often, especially on open terrain. Thus arises the question: What order shall be adopted for those movements?

These movements are effected in Manchuria by marching in platoon columns so as to avoid great extension. It is impossible to march with a wide front, for there is no room and it is impossible to use company formations. The troops move, endeavoring to cover themselves by the hills, keeping to the inner side of these as in rear of breastworks, but well-aimed shrapnel may still cause great havoc to the lines. The best provision for security on the march is—secrecy.

But as soon as the troops emerge upon open terrain, movements not only in column formations but even in deployed order, are absolutely impossible, taking into consideration the striking accuracy of modern artillery.

Troops arriving from Russia often paid a high price for their ignorance of the formation taken by Siberian troops for infantry movements under artillery fire on open terrain.

This formation is arranged so that the men run singly at 10 paces interval (see sketch No. 1).

It sometimes happens that troops under fire neglect to abide by this rule, but a severe chastisement invariably ensues.

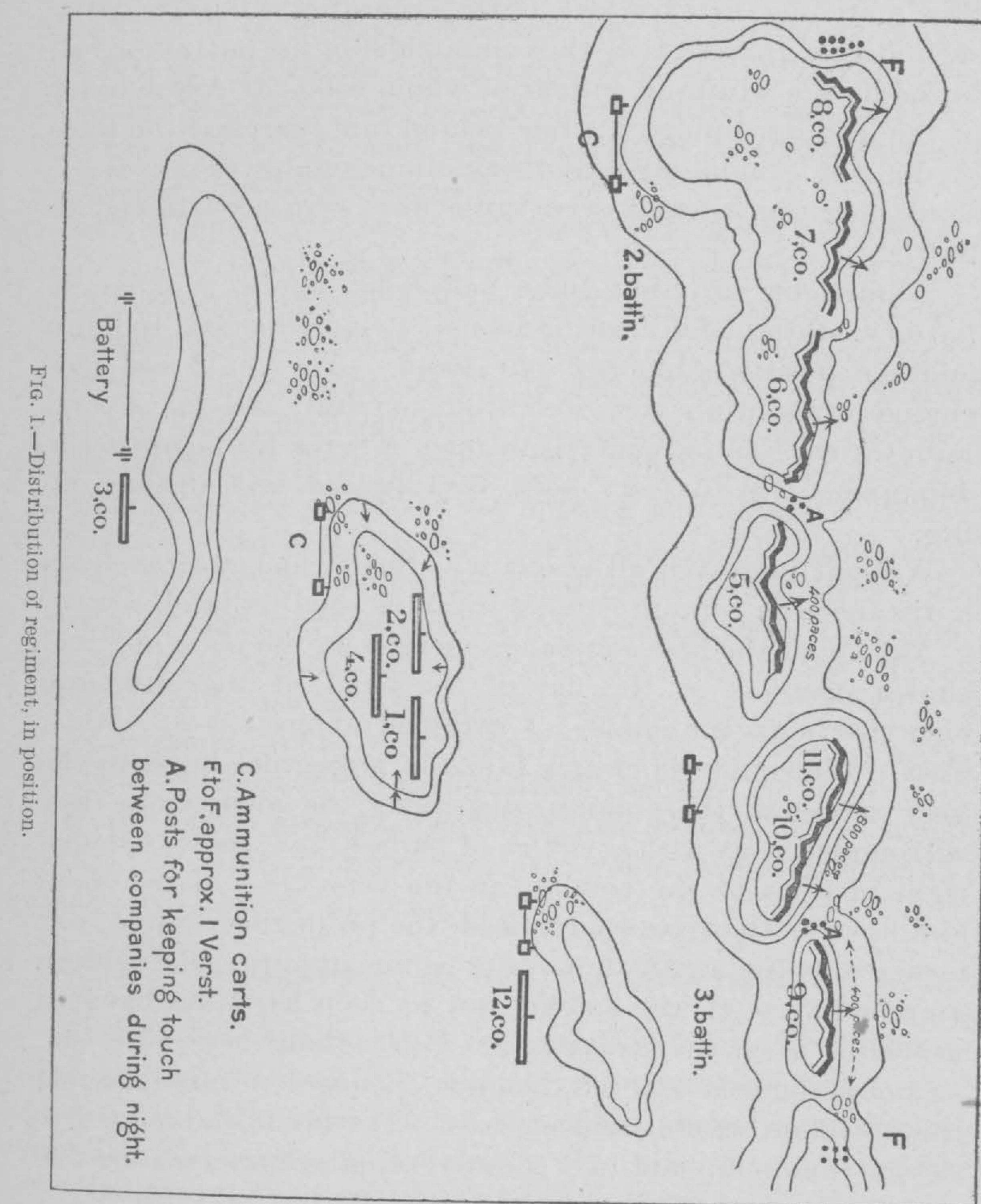


Fig. 1.—Distribution of regiment, in position.

I witnessed the following at Mukden on September 28:

A battalion of the "N" Rifles Regiment was to replace our regiment in our position, while we were designated for the attack. It was still light, about 5 p. m., and the fire on both our side and that of the Japanese had slackened. I began

to scan the neighborhood through my field glasses and saw suddenly most clearly and distinctly a column emerging some $1\frac{1}{2}$ versts (1,750 yards) in rear of us. It advanced slowly from behind a hill in column formation, by sections, to a wide, open plain of harvested kaoliang. The column was marching in excellent order according to peace time regulations: In front rode the commander of the battalion, followed by his adjutant, in rear of whom rode the commander of the leading company, while behind him marched the lines of the men. Suddenly something unimaginable took place—something which awed even those who were accustomed to battle.

It must be said that some half hour before, a Japanese battery, stationed in front of us, left its position and took up another position opposite our flank. We could see this change of position very well from our hill, and for several minutes we took advantage to open a fierce fire against the Japanese. The battery soon disappeared and opened no fire.

We had forgotten all about it. But it had noticed from a distance the column coming up to us, and hid and waited.

As soon as the first company emerged on the plain and had shown itself as on the flat of the hand, it was suddenly encircled with the smoke of shrapnel explosions as with a mist. We could see clearly how the projectiles burst in the very center of the column, dispersing the men; how they surrounded it as with a circlet of flames; how they exploded right in front of the column, in the very faces of the men; and how, as the troops advanced, the projectiles shifted, not losing aim for an instant. For some minutes the column marched through the smoke, but as soon as it disappeared in rear of a hill the fire ceased. But a long row of black, immobile figures was left behind. These few minutes cost the battalion several tens of lives. The fire lasted some five or six minutes, and we counted approximately some 60 shrapnel fired at the men.

The following companies proceeded at a run, according to the generally adopted formation, and arrived safe.

War is terrible, through the fact that every mistake, every error, brings about immediate punishment and often very severe chastisement.

MOVEMENTS IN THE ZONE OF RIFLE FIRE.

Such is the formation for movements under artillery fire and such is likewise the formation for marching under rifle fire. I am going to digress here, to say what "effective" rifle fire is and how it is understood by our regulations. According to the latter, "effective" rifle fire begins at a range of 1,000 to 1,400 paces. The Regulations say little about fire at longer ranges, except as used in particular cases, and in fire by volleys. In fact, the theories of the Regulations correspond but little to reality.

At a range of 2 versts (2,333 yards) rifle fire is now effective. This is plainly shown by the losses incurred by the company, and at a range of 1 verst (1,166 yards) the fire reaches enormous power. What can be done if we follow our Regulations and do not open fire at long distances? The enemy does not follow our Regulations, and showers bullets upon us. Shall we fire at large targets? But where are those large targets, when we positively see nothing and nobody? If by "effective" fire is meant fire which causes losses, then rifle fire is effective at the longest ranges given by the sight. It would be very well indeed if the arrangement of the sight allowed us to take advantage of the long range of our rifle to the utmost degree admitted by its ballistic data.

Experience proves that "effective" rifle fire begins at a range of 2 versts (2,333 yards=3,000 paces).

If the fire is strong, open terrain is crossed in the same manner as under artillery fire, by a chain, the men running singly at 10 paces interval.

DEPLOYMENT IN CHAIN FORMATION.

The deployment in chain formation is taken on reaching the zone of artillery fire, but local topography sometimes allows us to bring the column nearer the enemy under cover of hills. It happened sometimes that columns approached within several hundred paces of the position selected for the combat.

This is, however, a risky procedure, because the hills do not always afford cover against rifle fire, and shrapnel easily flies over them.

It must be a general rule to deploy into chain formation some 2 versts (2,333 yards) from the hostile position.

As to the distances between the firing positions of the opposing forces, they vary from 2 versts (2,333 yards) to several hundred paces. During the September battles before Mukden our companies were sometimes obliged to occupy positions so close to those of the Japanese that one could clearly hear the Japanese conversing, quarreling, and scraping the earth with their spades as they dug their trenches.

The entire company is deployed in a chain (line of skirmishers).

The company reserves are of no importance; they always incur losses, while they diminish the possibility of developing at once a strong fire, which might silence, or at least weaken, that of the enemy (a similar principle to the one adopted in the artillery). Rifle fire is so strong that a small unit will at once lose many men; there will be scarcely any rifles left and the fire will be ineffective.

It must be remarked that not only companies, but entire battalions are often deployed as skirmishers, so that there remain only the regimental reserves.

The chain starts at once at a run. If the chain is formed in rear of a hill or any other cover, it advances according to Regulations—deploying to the front. If it moves over open terrain, the men advance singly at a run, creeping, bent as low as possible, and take advantage of each fold of the terrain.

No march under fire is effected at full height, but the men bend; even the hills within the zone of rifle fire do not always give protection from bullets. A mass of spent bullets fall at times, others come from the flank, and if the hostile position occupies higher ground, the bullets fly over the inner, Russian side of the hills, and in such numbers that the best way to avoid them is to run as fast as possible to the position and lie down.

The nearer the crest of the hill the more do the men bend, and they often reach it creeping.

The formation of the reserves is, depending upon the cover, generally a deployed one. The order of march under fire is similar to that of companies in battle formation.

CONDUCT OF FIRE.

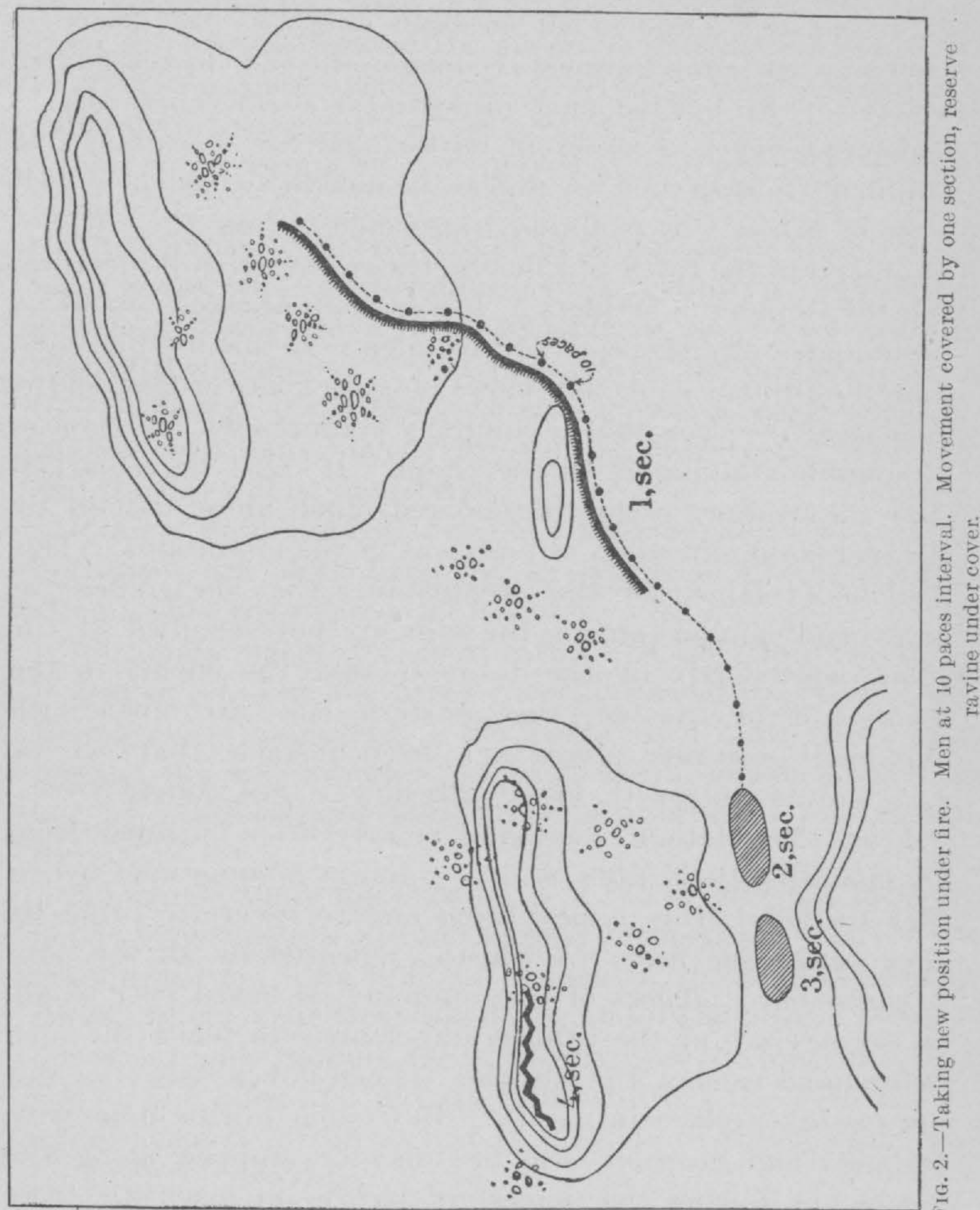
The conduct of fire (fire control) in battle is a difficult thing. The men strive to open fire immediately upon taking up their position, even without awaiting orders to fire, the designation of the objective range, or the kind of fire.

This haste is, first of all, brought about by the desire of drowning the consciousness of danger through increased activity, yet this is what most impedes the effectiveness of fire, the maintenance of order in battle, and fire discipline. It is difficult to stop such fire unless the men have been held well in hand before. It is almost impossible to hear the voice of command in the rattle of rifle fire, the explosion of projectiles, and the thunder of artillery. It was often necessary to shout commands into the ears of the men. Remembering, too, that the front is some 400 paces in extent, never less, and it may easily be seen that a company commander can give no intelligible commands to the chain. It must be remarked that the conduct of fire is rendered much more difficult by the increased extension of positions in the mountains. This may be explained by the circumstance that the gullies, ravines, and canyons among the hills are not occupied by the chain; also partly by the desire to take the enemy in the flank, and by the fact that modern rifle fire, even with extended positions, presents a fiery obstacle that can be surmounted only with great difficulty. (See sketch No. 2.)

Even the platoon commanders are often impeded from commanding their units, and therefore it is sometimes necessary to desist from volley firing and to revert to firing by clips (magazine fire). A whistle, repeated by all the non-commissioned officers of the company, is heard best of all. It is therefore of the utmost importance to teach the men beforehand to obey the whistle. It can not be said that this always takes place in reality. But much can be done with firmness and decision, and fire may be stopped along the entire line during the fiercest of battles at a whistle from the company commander.

The fiercer the hostile fire and the nearer the enemy, the more difficult it is to control the fire, especially in defensive action. The men grow more anxious, the tension of their nerves more intense, and the danger seems to grow nearer

and greater with the approach of the enemy. It is most important at that moment to keep the fire discipline well in hand, and to observe narrowly and see that the firing shall not be transformed into aimless rattling of rifles, which betrays the fact that control has been lost over the company,



for in such moments it is impossible to vouch for what the company is going to do.

It is on this account that it is so difficult to keep fire discipline well in hand during a battle, and to maintain a reasonable and well-sustained fire.

These difficulties are greatly increased during the night, the nerves are specially unstrung, and in the darkness it is impossible to see the enemy or our own men. No voices are heard, and in walking along the line it is easy to stumble and fall, while unaimed fire sounds without intermission, rattling along the entire front. From the direction of the enemy a fierce fire is likewise opened, and for hours the ear-splitting noise of musketry is heard through the night. It is exceedingly difficult to stop such firing. As soon as it has been stopped on one flank, and while going over to the other the rattling is again resumed on the former flank. The officer runs again to that point and the fire is silenced. He asks: "Who fired? Did you not hear my order not to fire?" Excuses are given: "We did not fire; it is in the second platoon." And a shot is again heard quite close. The thought arises that the men are firing involuntarily.

Sometimes a man will fire in his sleep and hundreds of shots follow, thus bringing about a useless loss of cartridges, a sleepless night, fatigue, nervous tension, wounded and killed by stray bullets. And there is before the men the prospect of days of battle.

The greatest obstacle is the nervousness which pervades even the troops who have been under fire.

Only by excellent training during peace time and with such discipline in the chain that not a single man shall fire until the order has been issued, and that the command and whistle shall immediately make them cease firing, can order in the chain be maintained and effective fire be obtained.

One of the best means to insure order in the chain is firing by volleys, but this, as has already been said, is not always possible.

The main principle lies in the preparation of the men during peace, and errors in this respect are shown in combat very clearly and in relief. In order to rectify these mistakes we were obliged to train the men in extended drill while in bivouac. These exercises were of great assistance. It is, however, not always possible to exercise the men; the works for the fortification of positions, the arranging of fording places, reconnoissances, etc., forcibly curtail these precious lessons under the fire of the enemy.

As to individual fire, it is rarely used, but is sometimes resorted to by picked men to shoot down individual hostile soldiers.

DEVELOPMENT AND STRENGTH OF RIFLE FIRE.

A tangible idea of the development and strength of rifle fire may be had by the enormous losses incurred by troops in battle and the percentage of losses from infantry fire; it greatly exceeds, as formerly, the losses from other arms, averaging 85 per cent of the total loss.

The great expenditure of cartridges in actual warfare is an excellent indicator of the strength of modern rifle fire. This expenditure is so large that, as far as I know, the ammunition chests of the Siberian troops follow the regiment in the ammunition train of the first line. The necessity of this measure is evident to all those who have seen how cartridges melt in battle. Scarcely have several cartridge chests been brought to the regiment when they are empty.

The expenditure of cartridges in this war will prove immense.

I know, through the computations of the officer in charge of the ammunition of our regiment, that it fired at Liaoyang 1,200,000 cartridges. It is still more evident by the fact that after uninterrupted firing, which sometimes takes colossal proportions, the stocks of the rifles are charred and the ends of the bayonets grow crooked from the heat to such an extent that they have to be taken off so as not to impede the firing.

Such is the strength of modern rifle fire, a stupendous force. It was difficult to conceive before the war what dimensions it had reached in our time. It is true that with such intensity the fire suffers in effectiveness, and a mass of bullets is spent in the air. There arises involuntarily the question: Would it not be better to fire more slowly, but with greater accuracy and better aim? But the fact is, that the long ranges at which fire is opened, the entire *mise en scène* of modern warfare, when the enemy is often positively invisible, forces one to have recourse to intensity of fire, to shower a rain of bullets upon a certain area. This mass of fire must make up for lack of accuracy of aim. We must likewise add that the short term of service tells upon accuracy and trueness of aim.

It is necessary to remark that there exists an important condition as far as accuracy of aim and effectiveness of fire is concerned; the distance of the objective must be determined exactly. This is difficult in battle.

The Regulations recommend: Firing until the range is found, determining with the eye, with the range finder, or by questioning the neighboring artillery. In battle only the first two recommendations may be resorted to.

The range finder (the Regulations recommend that of Souchet) is absolutely inadmissible, on account of the complications of its adjustment, the unsatisfactory results obtained, and the special conditions governing its use (signals, distinct and prominent local objects).

Where can these signals and landmarks be found? Often they do not exist at all. To place a soldier under fire for this purpose, is to send him to absolutely useless execution, for a level plain is needed for the measuring by paces, when in reality the terrain is broken.

In addition to this the entire complicated methods of the Souchet range finder is, like all other complicated things, not adapted to use in battle. Time, too, is lacking. The combined field glass and range finder requires for the determination of distances that a mounted or dismounted enemy shall wait until the range had been found by means of his height. This very rarely happens. Artillery is posted at a great distance and its targets are different.

Firing by volleys to find the range gives good results when the local conditions are favorable. This likewise does not happen frequently.

There remains the principal means—the eyesight. It is this mode of range finding that is used most frequently and by which the firing has to be guided.

This is why we deem it most important that during peace time frequent exercises should take place in estimating distances by the eye, taking advantage of each favorable occasion and not treating it as a tedious formality.

DETERIORATION OF RIFLES.

Frequent deterioration of rifles with the development of such intense fire is unavoidable. The breechblocks are those which suffer most frequently. There is but one means in

battle to replace deteriorated rifles—the utilization of those belonging to the killed and wounded. The bayonets are replaced, also the breechblocks, and sometimes the entire rifle.

The impossibility of cleaning the rifles, a thing greatly felt during the constant rains and the great changes in temperature in Manchuria, contribute likewise to the deterioration of rifles. During the dry season dust floats in clouds in the air and literally fills the grooves of the barrels and of the breechblocks.

The rifles are cleaned in bivouac, but lack of oil is greatly felt. It has been replaced by melted lard, but, in general, the rifles which I had opportunity to examine were greatly neglected.

The replacement of old rifles by new ones is made on a very economic scale. After the battle of Liaoyang only 8 per company were issued.

However, notwithstanding all these conditions of the modern *mise en scène* of warfare, actual observations show that great accuracy of fire can be maintained at a range of 2,700 paces (2,100 yards), only part of the company firing.

My company was once ordered to fire against a Japanese battery. It was, as usual, hidden from view by the crest of a small hill.

We were aware of its position, for the projectiles of our battery were exploding immediately in rear of that hill, and we could see from time to time the small black figures of the Japanese appear on the crest.

Fire was opened by volleys in squads at a distance of 2,700 paces (2,100 yards). We could clearly see through the field glasses how dust was raised after each volley along the crest. It was evident that the men aimed well. But what proved the effectiveness of our fire still more was the fact that the Japanese battery suffered our fire for some half hour and then suddenly showered shrapnel and finally shell upon us. Such a fearful thundering arose from the explosions of the shells that it was necessary to resort to firing by clips (magazine fire). The position of the company under the fire of the battery grew very serious. Fortunately our battery supported us with its fire. The Japanese artillery finally left us in peace and was silenced.

REMARKS ON THE JAPANESE ARTILLERY AND INFANTRY.

The Japanese ceased firing whenever they realized that their range had been found; such was the procedure in both artillery and infantry.

It is evident that the Japanese have adopted as a principle, to cease firing under well-aimed fire of the enemy. If our battery had found the range of the Japanese battery and aimed well, the Japanese immediately ceased firing and endeavored to change position unawares. The chain of sharpshooters did the same. In order to conceal their retreat, they put up dummies instead of men and wooden logs on broken wheels instead of guns. But these subterfuges were soon found out by us. The dummies are conspicuous by being placed at easily detected points at full height, while no Japanese will ever stand erect and immobile under fire, but rushes on quickly and hides. In this case we have taken some lessons from the Japanese. Our batteries have likewise ceased firing under well-aimed fire of the enemy and changed position. The artillerymen explained to me that change of position was made because the men grew nervous, did not aim, nor set the fuses under fire calmly, and that, consequently, it was better to change position or to hide in the trenches, awaiting the moment when the hostile battery shifted its fire against another target or ceased firing, being convinced that the enemy had been silenced, and to then shower a hail of projectiles upon it.

The best plan is to change position without being noticed, but it is still better to take up such a position under cover that it is impossible for the enemy to find it. For this purpose one gun is sometimes placed on the crest of a hill which it is not proposed to occupy, and rapid fire is opened from that gun. When the enemy begins to answer, observations are taken, his position and range are ascertained, and when the whereabouts of the hostile battery is more or less accurately known, it is suddenly overwhelmed with the fiercest of fires. Before the enemy has time to come to his senses, to find his opponent and his range, he will suffer such losses that all he can do is to get from his position as fast as he can or to hide.

In general the victor is he who has succeeded in taking the other unawares. A great rôle is played here, not only by accuracy of aim and knowledge of the locality, but by ingenuity, presence of mind, and common sense. The one is trying to deceive the other. The same may be noticed in the infantry likewise; sometimes under well-aimed artillery fire the chain creeps down unnoticed and hides in a well-sheltered place, leaving only the sentinels in position, or changes position without being detected, while the enemy continues to thunder against the former position.

Much is said about the accuracy of aim of the Japanese artillery. It is explained by the skill of the Japanese artillerymen, and by their knowledge of the locality and of the conditions of mountain warfare. It is said that they have excellent maps, which give them the opportunity of accurately determining distances by means of a compass. At any rate, it is impossible to explain their superiority in accuracy by the superiority of their material over ours; our artillerymen are unanimous in saying that our guns are excellent, much better than those of the Japanese. But the Japanese had been learning the ways of their guns for many a year before the war, while in our army some of the units made the acquaintance of the guns on the road and many were taught gunnery in the railway cars.

In general it must be said that the accuracy of aim of the Japanese artillery is above criticism. It was noticed more than once that the Japanese battery found the target at once without having to fire previously so as to get the correct range (ranging). I remember how their battery hit with its first shot the chain on our hill. I saw how the battery followed with shrapnel the mounted volunteers, galloping at full speed over the hill, and how it put 12 riders and 19 horses *hors de combat*; and I know how 2 officers and 32 privates were disabled within half an hour in our battery. It is likewise well to note how the Japanese batteries watch their infantry, and how energetically they support it, not only when the hostile artillery is playing havoc with it, but also when they notice that from one of the infantry-firing positions a particularly well-aimed and well-sustained fire has been opened. The Japanese battery immediately opens fire against such a position, thus proving a mighty ally of its infantry.

As for our artillery, it had to operate under absolutely new and unknown conditions. Having been taught during peace time to select positions on crests of hills, it suffered great losses during the first period of the war, almost useless losses, but it soon learned to adapt itself to the new requirements of modern warfare.

An absolutely new factor in artillery combat was firing against invisible targets. In present battles, the battery does not see its opponent and at the same time is likewise invisible to the enemy. Hidden in rear of a hill, or rather separated from the enemy by a whole row of crests, it strikes and incurs losses without seeing the target against which it is firing and from which projectiles are showered upon it.

We saw more than once how our batteries vanquished the Japanese artillery at Mukden. The fire of the Japanese batteries was not nearly so fierce (relatively), as at Liaoyang, which was chiefly felt by the infantry. According to the experiences of former battles, what we feared most was that our artillery would cease firing, for then the Japanese batteries fired with impunity against the positions of the infantry regiments, and we suffered heavy losses. Justice demands that the difficult conditions be noted with which our artillery was confronted, and from which it emerged with great credit.

The Japanese infantry is far behind the Japanese artillery in accuracy of aim. The Japanese infantryman may, with good reason, be called a machine gun, on account of the rapidity with which he loads and fires his rifle. But that most of the bullets fly over the heads of the enemy is likewise true, because he does not aim well. I have personally noted how, in attack, the Japanese, placing his rifle on his knee or on the breastworks, rattled with marvelous rapidity at his breechblock without taking any aim whatever.

During the night attack of September 29, when our companies advanced like a wall, in platoon columns, the Japanese met us with fire up to the last moment before the bayonet charge, firing almost up to actual contact. Notwithstanding this, we had very slight losses, because the bullets flew in clouds over our heads. If, in spite of this, losses from rifle fire are great, it is because the Japanese have adopted for the infantry the same principle as for the artillery—that of showering a mass of fire upon the enemy. In reality

the bullets come like hail, and the Japanese artillery fires not only against important and large targets, but it often happened that a battery opened a running fire against single men. It is evident that the expenditure of cartridges and projectiles must be enormous in the Japanese artillery, though not always bringing good results. Thus at Liaoyang a Japanese battery showered projectiles for two hours on an area where there was only one officer placed for observation. The fire was so intense, according to the words of an eyewitness, that the ground was all torn up by the projectiles, presenting the aspect of a plowed field. Such cases of ineffective expenditure of a mass of projectiles are quite frequent with the Japanese principle of firing against areas.

It likewise happens, as at Tashihchiao, that the Japanese artillery is forced to cease firing because all its projectiles have been expended.

Such expenditure can not be thought of in our army, for with a line of communication of 8,000 to 10,000 versts, our artillery would have been without projectiles in a very short time.

EFFECTIVENESS OF FIRE WITH VARIOUS PROJECTILES.

As regards effectiveness of fire with various kinds of projectiles, the first place must be given to shrapnel; it is very difficult to find protection against it. Shallow trenches for firing in lying-down and kneeling positions give but little shelter. The best are man-deep trenches, of which more shall be said later.

Apropos of high explosive shells, much has been said about the *shimose* shell. This projectile, according to my opinion, is least effective against live targets. It bursts into very small fragments, almost into dust. It does but little damage, but the noise is fearful and its explosion throws up a great column of black smoke, mud, pebbles, and fire, which produces a great impression upon inexperienced soldiers. The moral effect is absolute.

As to lyddite projectiles, it must be said that the gases generated are very noxious and poisonous, and long and serious diseases are brought about by lyddite poisoning. Its effect does not develop at once, but several days later, and brings

about loss of hearing, smell, taste, impairs the eyesight, and often results in paralysis and long fainting fits.

Convalescence is very slow and there is always the question if a cure is permanent.

A lyddite shell may be recognized by the yellowish green tint of its smoke and by a strong, disagreeable odor when it explodes.

THE COMPANIES DETAILED TO SUPPORT ARTILLERY.

Speaking about the artillery, something should be said about the companies detailed for its support. In the orders issued for the Manchurian army it was directed that for each battery 2 companies should be detailed as support. It is evident that a support is indispensable; infantry, in general, is a necessary ally to artillery: on the march it frequently helps to extricate the guns, to surmount obstacles on the road, and in combat unsupported artillery often risks falling into the hands of hostile artillery or infantry. There were cases of capture of guns on our side as well as on that of the Japanese, thanks, usually, to the fact that at the moment of danger, the batteries had no protection, no infantry supporting them. But the detail of companies for the support of artillery is a great, though unavoidable, evil to regiments. If from 3 battalions 2 companies are detailed to the artillery and 1 to the train, the regiment loses not less than 500 bayonets. This is a great loss, a loss that can be felt. This is why I deem most worthy of attention the opinion which has more than once been debated in the press, that of organizing companies for artillery supports during peace time. The advantage is self-evident; the regiment does not lose any large amount of its fighting strength; the supporting companies, forming one unit with the battery, will get accustomed to it and become its staunch assistants and defenders, and, in case of losses among the gunners, may take their places. All this is of great importance to the battery itself.

THE GENERAL CHARACTER OF MODERN INFANTRY COMBAT.

Speaking of the characteristics of modern infantry combat, we note the following general traits: The deployment of large units as a skirmish line; the absence of small partial

reserves; the desire to develop at once the greatest intensity of fire; the advance of skirmishers at a run, bent double, and sometimes creeping; the advance under effective fire one by one; the movement in the zone of fire in chain formation; the difficulty of controlling fire and the necessity of developing fire discipline in time of peace; the unparalleled development of rifle fire; the immense expenditure of ammunition; the necessity for an uninterrupted supply of cartridges to the fighting line and a close touch of regiments to the artillery parks; the deterioration of rifles and the necessity of replacing them frequently; as a rule, enormous losses in infantry combat and the tenacity and duration of infantry combats without decisive results.^a

THE ATTACK AND BAYONET CHARGE.

Let us now take another phase of infantry battle, the most decisive of all, for which preparations are made not only for several hours but several days, and the result of which gives always a decided and final preponderance to one side or the other. I mean the bayonet charge.

^a We must make note here of an anomaly in the Field Service Regulations which tells in war. When a sentinel is posted from the chain or in security service, endeavor is made to place him so that the disposition of the troops can not be detected. But according to the Regulations a sentinel is not allowed to sit or lie down. In reality the placing of a sentinel under fire at full height is to send him to be shot—he will soon be killed by the enemy. Therefore the sentinel should be either kneeling, sitting, or lying down; he should stand only in rear of good cover or when the enemy is distant. It is imperative to insert in our Regulations permission for the sentinel to sit or lie down in case of need. Moreover a man lying down can more easily detect the noise of approaching footsteps along the ground.

We must likewise observe that the outposts at night should be stronger. The companies of the fighting line send out patrols and outposts during the night. If the outposts are weak (4 to 6 men), it is difficult to expect calm and reasonable reports. Darkness and the vicinity of the enemy, and the strain after battle, bring about an anxious feeling, and each shot, a single enemy, the approach of a hostile patrol seems the advance of an entire column. The best means to avoid false reports and alarms is to strengthen the outposts to such an extent that they shall represent a certain force. When, through actual experience, the outposts were strengthened to 10 men, the character of the reports was altered, the men grew calmer and more firm, and the unreasonable, continued reports, "a column is advancing," were replaced by reports of the approach of patrols and single men.

THE IMPORTANCE OF THE BAYONET.

Before taking up the technical discussion of the attack, I shall say a few words about the bayonet, over the importance of which obstinate discussions are taking place even at the present moment, although the present campaign has given so many decisive facts in its favor as practically to preclude discussion.

As a participant in bayonet charges, I had occasion to see how the bayonet in a few short moments took trenches, against which thousands of bullets were fired in vain for three entire days. I have seen the condition of mind of the victorious soldier, noted his elation after a bayonet attack, and how decisive and relentless is the struggle from which emerge only the living victors and the dead vanquished. There is no middle path.

It is strange to hear opinions disparaging the bayonet, or giving it only the casual importance of an accessory to the rifle. The fact remains, the bayonet has been highly serviceable during the last campaign, and it is not a mere coincidence that not a single important battle has been fought without a bayonet charge.

Study the fighting records of the present war and you will see that almost every regiment has fought with the bayonet and that the regiments who were in the theater of war from the beginning of the military operations have several times made and received bayonet attacks. It is sufficient to say that on September 29 and on October 1 and 3, a bayonet fight was raging along the entire front of our enemy. Entire corps fought with the bayonet. Such facts can not be disputed.

It has been maintained that fire is sufficient to repulse an attack, giving as an example the fact that our attacks as well as those of the Japanese were repulsed by fire with great losses to the attacking party. Such instances have taken place, it is true. But why are not those examples quoted wherein the attack could not be repulsed by fire and the enemy ended by taking to the bayonet? What shall a unit do in such cases, which does not know how to fight with bayonets? Will it be able to withstand the approach of the enemy to the distance needed for hand-to-hand combat?

On the other hand, I shall permit myself to ask: Were positions, fortified ones especially, taken by fire? No, if

such positions were abandoned by us, it was done in obedience to orders, and not by reason of the fire of the enemy.

The Japanese attacked our regiment at Liaoyang several times on August 17 and 18. It is true that they suffered great losses from our fire, especially when they advanced in column formation. Their companies and battalions literally melted away, leaving whole heaps of dead behind. Several times, after having approached us to a distance of some 300 to 400 paces, the Japanese turned back in disorder. But on the other hand, in that same battle they more than once went so far as to charge with the bayonet, and fierce hand-to-hand fights ensued.

If our soldiers were not taught to look upon the bayonet as a final and inevitable recourse in each battle, he would probably abandon his position and not attempt to repulse the enemy with the bayonet.

The Japanese did not force us to abandon a single position at Liaoyang by fire. And the fire was indeed fierce. After silencing our artillery, the Japanese could operate under most favorable conditions and literally covered us with projectiles.

Our regiment lost 18 officers and about 700 men. But notwithstanding two days of this sweeping rain of bullets, the Japanese could not dislodge us from a single one of our trenches. If we left Liaoyang in the end, it was not the Japanese fire that made us do it.

During the September fights at Mukden, both ourselves and the Japanese, lying in our trenches, showered bullets and shrapnel against each other, suffered losses, and knew no rest, either by day or by night, but neither the one nor the other side lost an inch of ground. It seems to me that such a situation may last indefinitely, merging into an immobile position fight, leading to no decisive result in the end.

On the other hand, in the night attack of Tuminlin Pass three lines of intrenchments were taken with the bayonet, and those of the defenders of the trenches who had not fled remained on the spot.

The educational meaning of the bayonet can likewise not be passed by without notice, its very destination and arrangement rendering it imperative to meet the foe breast to breast and awakening the desire to rush forward, gives an idea of the fire fight only as a preparation for the final bayonet

charge. The soldier, educated in such ideas, will not fear to meet a bayonet attack and will not himself hesitate to charge.

Much has been said about the Japanese way, so new to us, of meeting bayonet attacks—that of running back when our men charged and then opening fire on them. The Japanese acted thus at Turenchen. This mode of defense captivated some.

It seems to me that at maneuvers, on the drill ground, where there are no bullets or shrapnel, such a mode may seem desirable. But would such a maneuver not be too risky in battle? And if the unit should run away in reality? This is possible. Moreover, how can such maneuvering be adapted for the defense of a fortified position when the enemy makes a bayonet charge? Run back, abandon the fortified positions to the enemy and then retake them by fire?

Is it not due to the fact that the Japanese at Turenchen adopted this sly maneuver that our two rifle regiments (the Eleventh and Twelfth), surrounded by an overwhelming enemy, were able to retreat instead of being absolutely crushed? This might have been their fate had the Japanese charged with the bayonet. There is another example, during the attack on Putilof Hill, when the Thirty-sixth Regiment charged with the bayonet, and the Japanese forgot or had not time to fix bayonets and were all stabbed to death.

It is very significant that the Japanese soon desisted from this maneuver. At both Liaoyang and Mukden the Japanese charged with the bayonet and received bayonet charges with counter attack. The result was that the Japanese having experienced the effect of the bayonet upon themselves changed their opinion on this subject and learned from us how to use it, while we are still squabbling over its importance. The statistical data on losses caused by the bayonet are likewise very convincing. These losses are almost as large as those caused by artillery fire, in spite of the enormous development of the latter.

Such are the indisputable facts given by the present conflict. This war did not bury the bayonet; on the contrary, it demonstrated most vividly all its power and moral importance, which, it is probable, it will maintain unaltered as long as there are wars. Victories will be gained, as always, by the strength of the spirit.

ADVANCE IN CHAIN FORMATION.

Experiences gained in battle, especially in that of Liaoyang, where the Japanese were repulsed along the entire front and suffered great losses, showed what losses are liable to be incurred by troops attacking during daylight. To decrease the number of losses in the chain, as has already been said, the men run over one by one, as much under cover as possible. On this account it frequently happens that the chain is formed suddenly at a new close distance, and only sudden fire gives notice of the proximity of the enemy. The locality does not always render it possible to approach so covertly and unobserved, but in the mountainous region of Manchuria, where there is much brush, rolling hills, and rocky ranges, such maneuvers are often used with success.

An advance to the attack over open terrain always carries great losses in its wake.

RESERVE FORMATIONS.

The reserves advance sometimes in column formation.

In the mountains it is sometimes possible to bring them forward without incurring great losses, but on open terrain the movement in column formation of reserves (not only regimental but divisional) brings about disorder and disorganization of the units, on account of the great losses incurred. Movements in deployed order, though incurring lesser losses than in column formation, are likewise risky.

During the battle of Sandepou, in January, our reserves suffered such losses that it was necessary to deploy them before they had melted entirely. But in general it is much better at the outset to adopt dispersed order for reserves under heavy fire.

THE LAST FIRING POSITION.

The last firing position has not at present been pushed back, but has been brought forward. According to our Regulations it is located at from 300 to 500 paces from the hostile position. If a bayonet charge is begun at such a distance it is most doubtful that many will reach the enemy; the greater part of the men will be shot down, while the rest will run back. If the defender does not lose his

head and fires several volleys, the attack may be considered as lost.

The last stand is generally made at some tens of paces from the enemy. The men often remain a very long time in this position, because neither the one nor the other side can resolve to make the attack. Sometimes the hostile lines are at a distance of from 15 to 20 paces from each other, and remain so until a few bold men rush forward, shouting, against the trenches. These are followed by some 20 of the more resolute, and in rear of these rushes the entire company. Then one may be sure that the company, which thus charges with the bayonet, will not yield. But it is the officer's duty to make the most of that moment, and not to allow the *élan* to cool, by giving his personal example, for never will men follow a private as they will an officer. But the officer gets the first bullet and the first bayonet. This is why our officer's corps has incurred so many losses.

The Japanese army, as well as ours, has adopted for meeting the attack the following maneuver: To withdraw to some 10 paces in rear of the trenches, so as to leave between the enemy and the defenders an obstacle, the trench, and then to rush upon him with the bayonet while crossing the trench; taking advantage of the momentary disorganization of his lines.

It seems to us, however, that shallow trenches can not be a very serious obstacle; moreover the attack does not always charge with the bayonet even at short range, and then it is necessary for the defender to cross the trench for the purpose of repulsing the enemy. Otherwise it might happen that the two parties might remain for a long time shooting each other down at close range.

The general rule before a counter attack is to fire one volley at close range and then to charge with the bayonet.

It is necessary to say in conclusion a few words on the great importance of night attacks at the present time. This importance may be easily understood if we take into consideration the fact that the defender is bereft of such a mighty ally as the fire of his artillery and rifle fire at long range.

During the period of the September and October battles before Mukden our troops made night attacks.

In addition to the enormous advantages over day attacks as regards losses from fire, night attacks allow the troops to be led in compact masses; in a wall, so to speak. Thus, for example, on September 29 our regiment marched in platoon columns without intervals. The men march bravely, because they suffer no losses at long distances and those incurred at close range are relatively small. Moreover, they attract little attention, and the feeling of nearness to each other and of compactness and numbers give a sense of security and encourage the weakest.

The defense, however, feels the approaching danger, but does not see it; this condition of ignorance and nearness of the impending blow can not but impress them unfavorably. It, therefore, often happens that before the bayonet charge, the men leave the trenches, first one by one and later in groups. I had occasion to note personally how, before our attack with the bayonet, the Japanese, one by one, threw down their rifles and ran from the trenches (September 29 and October 12).

On the other hand, the disadvantages of night attacks are the difficulties encountered in orientation, direction of the blow, and conduct of the troops.

It is indispensable to reconnoiter the locality during the day, and for each and everyone to know his rôle and designation. This is, unfortunately, very often neglected.

GENERAL CONCLUSION ON MODERN ATTACKS.

Attacks made in daytime lead to great losses, even in case of success.

The advance is made by chains, at a run or singly by the men, as covertly as possible, under protection of the folds of the terrain and other local objects. The reserves may follow in column formation, but protected by the necessary cover; on open terrain and under fire the reserves advance likewise in dispersed order in the second line. The last stand is made at a distance of a few tens of paces from the enemy; it is not always possible to induce the company to charge with the bayonet; it is indispensable to give a personal example and to catch the right moment. The result of a bayonet charge is always prompt and decisive.

SPECIAL SIGNIFICANCE OF NIGHT ATTACKS.

THEIR ADVANTAGES; DECREASE OF LOSSES BY FIRE, COMPACTNESS OF THE ATTACK, MUTUAL SUPPORT.

It must be kept well in mind that night attacks are made without firing a single shot.

As soon as the attack opens fire it means that the unit is no longer held in hand by the commander, that it has lost its resolution and order, and it is difficult to charge with such troops. In general the characteristic traits of the attack have not altered, but the losses have grown much larger. Cases of attack have not grown less frequent in the present campaign than in former ones and, as heretofore, the crowning of the battle is made with the bayonet.

THE TRENCHES.

Speaking of combat, it is impossible to refrain from making a few observations as to the meaning and development of field fortifications of all kinds as shown by the present war.

It may be remarked about the late campaign that the spade takes its place side by side with the rifle, and the spade has become a purely fighting weapon. In the very first moments after the occupation of a position trenches are dug, generally for firing lying down. If the position is prepared beforehand, the trenches are generally dug for firing in a standing position, with traverses and shelters. These works are undertaken by the troops themselves.

The erection of redoubts is likewise in great favor; they are supplied with breastworks which may withstand artillery fire and with artificial obstacles—barricades, pits, wire entanglements, and fougasses. All these works are made by engineers and sapper troops and we are not going to discuss them. We shall only observe that among all obstacles in field warfare wire entanglements have proved the most effective, being almost insurmountable and withstanding artillery fire exceedingly well. Wire entanglements present to the attacking party an obstacle very difficult to conquer. Among natural obstacles we shall point out the kaoliang. Bent at an angle about 1 arshin (2½ feet) from the ground, it presents such an obstacle to cavalry and infantry as to require the use of the hatchet to effect a passage.

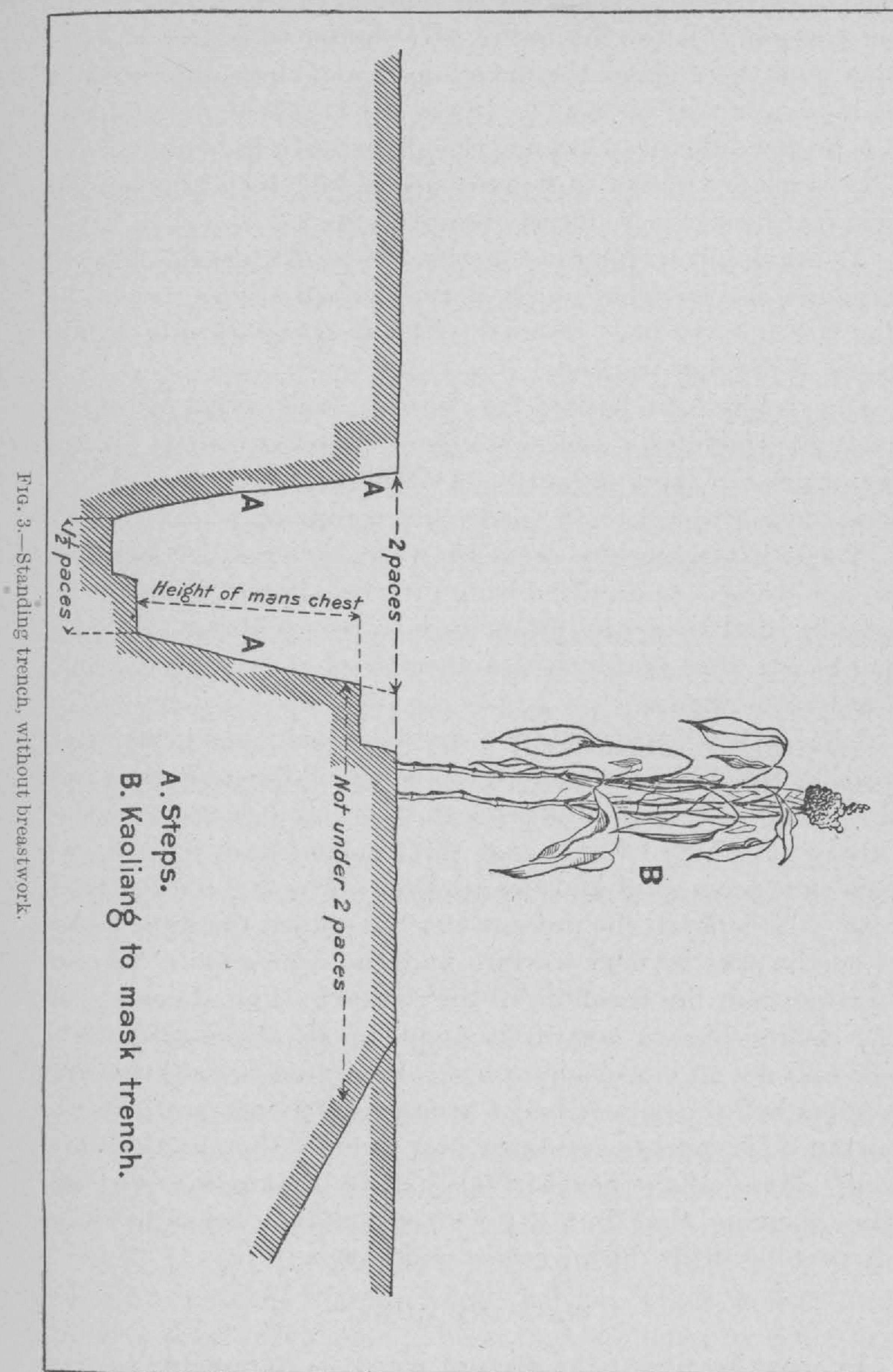
We must remark that shallow trenches (for firing lying down or kneeling) do not give much shelter from the enemy's fire—shells destroy them easily and shrapnel hits from above; rifle bullets often ricochet, but this does not always save. The principal aim of these trenches is to hide the men from the eyes of the enemy; the marksman shows only his head and, thanks to screening, the trench merges into the surrounding locality and at a distance of even 1 verst (1,167 yards) it is often impossible to discern it. It is only betrayed if looked at from above by the black line of the excavation. Therefore, trenches make it difficult to determine the disposition and strength of the enemy and to find his range.

Best of all are the trenches adopted by the Siberian troops—of man's height and without breastworks. Such trenches disappear from the eyesight at several hundred paces and present a safe shelter from artillery fire, because the entire mass of ground between the trench and point of burst acts as a breastwork. The narrow opening of the ditch protects against shrapnel, and when the men sit on the step, leaning against the escarpment, they are almost entirely sheltered; for rifle bullets there is only a very insignificant target—the head of the soldier. The earth from the ditch is strewn all over the ground and is masked according to local conditions, with chumiza, beans, grass, or kaoliang (see sketch No. 3).

Such trenches are dug very rapidly and are absolutely invisible from a distance. It is very difficult to find their range.

The masking is of great importance at the present time. It is of great advantage, not only because it renders the finding of the range more difficult, but also because it hides the troops from the eyes of the enemy. Justice must be rendered the Japanese; they hide their trenches and fortifications in a most masterful way. But we have learned that lesson likewise. Sometimes false trenches are dug, old caps are fastened there, and sticks are placed in lieu of rifles. It often happened that both artillery and rifle fire were opened against such trenches.

Light blindages may serve as protection against shrapnel and bullets, and are often used in field fortifications. They are made of thin poles, 2 to 3 inches in circumference, covered with two layers of sod. They can not give protection against shells. It must be admitted that blindages have many opponents: (1) They obstruct the line of fire and require much



time and material; (2) they are not of much use, for they are easily destroyed by shells; their number in the trench (2 to 3 per company) is too limited to give shelter to a large body of men, and there arises the question who of the company shall be hidden in rear of them? It has likewise been noticed that it is pretty difficult to assume the offensive from behind cover. This is deeply rooted in human nature and such blindages in field fortifications are merely temptations.

As far as intrenching is concerned, it must be said that the Japanese use trenches much more than our troops. Our soldier has not yet been imbued with the necessity and importance of digging trenches.

Our soldier, to lighten his burden, will willingly throw away his spade as a useless weight. Moreover, there are too few spades in the company. At Mukden our regiment possessed only from 3 to 10 spades per company.

Notwithstanding this trenches were dug almost constantly by our troops, especially during intervals in the fighting. It may be justly said that Manchuria is covered with intrenchments and that many thousand miles of trenches have been dug by our armies.

I had often heard, before I had occasion to see them personally, about the cleanness and beauty of Japanese trenches. But those I saw at Mukden can not claim those qualities. On the contrary, I found that the trenches built by our own men were more solid and cleaner than those dug by the Japanese. In general, the present war has shown the importance of earthworks in field warfare and the necessity of demonstrating their full meaning to the soldier in time of peace, and of teaching him to regard the spade as a faithful ally of the rifle and not as a useless burden. It can not be said that our soldiers before the war had a true comprehension of the importance of trenches and knew how to build them rapidly and well. Many of the new arrivals had to be taught under fire, thus showing that but little attention had been given to intrenching drills during peace maneuvers.

MACHINE GUNS.

In speaking about the present war it is impossible to pass over unnoticed this new weapon, which in a short time has shown itself to be the most deadly invention of military

ingenuity. These are machine guns. First used at Turenchen, they were extensively employed in all the following battles.

Light, mobile, occupying but little room, requiring not too much cover, they are easily carried by horse or men to the steepest summits inaccessible to artillery, and open from these points of vantage their well aimed and deadly fire. Easily manipulated, they soon find the range of the target, and once having found it, follow it uninterruptedly. It is possible to leave the zone of artillery fire by moving to one side for several hundred paces.

It is more difficult for a battery to change its aim and direction when the target is moving briskly, but the machine gun changes easily and rapidly the direction of its sheaf of bullets, literally covering the chain with them. A column falling under the fire of a machine gun can with difficulty leave the zone of fire and suffers enormous losses in a very short period of time.

In modern battles the harsh, broken rattle of the machine guns is heard uninterruptedly for whole hours, producing a disheartening and irritating effect on the men. In addition to the losses suffered by a detachment coming under fire of machine guns the enormous losses incurred in a brief period of time cause great depression. The greatest effect is produced, both morally and physically. It is not surprising, therefore, that the machine guns were christened by the men "the devil's spout."

HAND GRENADES.

Hand grenades, which may be called hand artillery on account of the effect produced by them, were first used by the Japanese for the repulse of bayonet charges. They are used only in bayonet fights, for the attack as well as for defense, and are thrown at a distance of 10 to 15 paces. The Japanese grenades which I had occasion to see were spherical in shape, having the diameter of a saucer. They burn with a bright, reddish flame, burst with a great noise, and scatter a sheaf of bullets. The wounds inflicted by them are far more serious than those made by rifle bullets. The defect of these grenades is their being easily extinguished while burning, which we did by covering them with sand.

Not much importance can be given to hand grenades in bayonet charges, as with a swift onrush they can do but little harm.

MARCHING MOVEMENTS, ARMAMENT, EQUIPMENT, AND SUPPLY OF PROVISIONS TO THE TROOPS.

CLIMATIC OBSTACLES.

Taking up the discussion of marching movements, we must first of all mention the causes which can not be set aside and from which both sides suffer equally. They are climatic, heat, reaching 40° Reaumur, bringing prostration in its wake; wind, raising clouds of blinding dust, hurting the eyes, filling the mouth and nose and penetrating everywhere, and rain, the worst of plagues, soaking the men through and through in a few moments and transforming with lightning rapidity small rivulets into roaring torrents and the roads into impracticable marshes. The mud reaches the breasts of the horses, covers the spokes of the wheels of heavy wagons sinking in the soil, and the men extricate their feet with difficulty from the sticky mud. Only Chinese *arbas* (mere platforms on two enormous wheels) survive the swamps and holes of the impassable Manchurian roads.

The draft horses get into most pitiful shape. It is painful to look at the artillery horses straining their last efforts to pull out a sunken limber or gun carriage, only to again stick hopelessly in the endless swamp a few paces farther. It is well known that we were obliged to leave some of our guns behind, because it was impossible to extricate them from marshy ground.

We had occasion after our retreat from Liaoyang to observe some fifty horses and several scores of shouting and screaming men endeavoring to pull a pontoon out of the mud into which it had sunk. The horses could hardly move their feet in the thick muck, and the men themselves could hardly stand up. I do not know how they succeeded in extricating the pontoon.

Therefore great losses and deterioration of material were unavoidable, and losses among the horse contingent were very great. Retreating from Liaoyang we met every hundred paces the carcasses of horses.

The mules and donkeys showed themselves hardier and less exacting, especially the mules—very strong and large animals. Both are often met with in the trains of the Siberian troops for draft and pack purposes. Small donkeys are often used as pack animals, and in spite of their small stature these dwarfs easily carry loads weighing 5 pouds. (1 poud or pood = 36.07 pounds.)

As far as I could gather, the mules and donkeys very successfully replaced horses in our trains.

In Manchuria formidable obstacles to military operations are met with in the numerous rivers and rivulets. Although the rivers, even such large ones as the Liao and the Hun, are shallow, their beds are covered with ooze. The infantry and cavalry find fords easily and cross over without difficulty, the water reaching in some places not higher than an infantryman's chest, but the vehicles impede the movements greatly, and the artillery requires that crossings be prepared.

The hills in southern Manchuria present a still greater obstacle. Their numberless ranges seem small and not difficult of passage from a distance, but as soon as one of these hills has been crossed another rises still higher and steeper. The crest which seemed so near, looms up high, the ascents and descents grow so steep and precipitous that the vehicles can have the brakes put on with difficulty and the guns are often overthrown. The strain upon men and horses is continually increasing, the progress grows slower and slower, until men and beasts stop exhausted. If we add to this, as during the Liaoyang combats, the intense heat and burning thirst, it is easy to imagine the cost of such passages over these hills. Here appears the full meaning of the causes increasing the difficulties of the campaign, causes that are removable, but which have not been removed.

REMOVABLE CAUSES—LACK OF PLANS AND MAPS.

It is easily understood that under the conditions of the campaign against which our troops had to cope in Manchuria each surplus hour, each surplus verst increased the burden and difficulties of the march, which frequently was a forced one. It often happened that the troops had to wander hither and thither over unknown roads on account of a lack of maps. The country north of Liaoyang was shown in the

maps as a large white spot. It often happened that for 2 or 3 hours the men marched in one direction, after which time they had to stop, as it was found that they had taken the wrong one. Much time was lost in looking for the right road and deciding if it was so. Then there came another halt and the same thing was repeated. The result was that, under the best conditions as regards weather, roads, and distance from the enemy, a march requiring 4 hours was made in 16 hours. Add to this the loss of time (sometimes 3 hours) waiting for the camp ground to be chosen, which under such circumstances could not be prepared in advance, and the march, which might have been a pleasure walk, was transformed into a forced one.

It may be said that for aiding in the selection of the bivouac and for finding roads, guides and interpreters could be used. But their usefulness seemed rather doubtful to us.

In reality each regiment, and sometimes each company, had with it several interpreters, whom the men called *vaska*.

Among them one could find grown men and children. The latter were the better; they soon learned the Russian language, grew attached to the regiment, were petted by the officers and men, and, on account of their vivacity, quickness, and reliability, could very well fulfill their duties, but as guides they were not well acquainted with the country. The grown men often did not know the Russian language sufficiently well and did not inspire enough confidence. When conversing with the local inhabitants they talked fast and in a lively manner among the numerous and curious crowd of Chinese. But what were they talking about? Perhaps they gave information as to our strength, whence we came, and where we were going. Such information was very well paid for by the Japanese.

It happened sometimes that the interpreters disappeared for a long time and then reappeared. To the question: "Where have you been?" came the answer: "I went to see my wife at Mukden." But we had to use even such interpreters as that, because we ran the risk of being entirely without anyone speaking the language of this foreign country, filled with spies and Japanese agents.

CLOTHING, EQUIPMENT, AND FOOT-WEAR.

The condition of the clothing, foot-wear, and equipment had no less influence upon the difficulties of the march and combat.

The soldier's gray overcoat is the heaviest article of clothing. Sufficiently warm to protect the men from the cold, in summer it is too heavy, and especially after a rain it is a great burden. But as there are no waterproof capes in the soldiers uniform some of the units did not part with their overcoats even with the advent of hot weather, and the soldiers were obliged to carry that burden.

The foot-wear consists of heavy and easily torn boots, which were absolutely impossible in summer and in the mountains.

On account of the difficulties of the campaign in the Far East, these boots, without exaggeration, may be said to have been transformed into heavy leaden weights. In walking over the slippery hills the soles slid and the feet slipped in different directions. Instead of two steps one had to make three. Moreover, they are air-proof and the foot was covered with perspiration, and a soldier's wet boot is hard to dry.

However, some organizations left the overcoat in the store-houses, preferring to get wet through, and even to freeze, to carrying along such a burden, and the boots were replaced by low, leather sandals. But no one has endeavored to replace the biggest burden, the greatest obstacle to free movements of the soldiers in battle and on the march—we mean the unwieldy clothing bag of their equipment.

These latter seem to have been invented on purpose to render the soldier incapacitated for battle and for the march.

These clothing bags tie the soldier down; they cut and hurt his shoulders; they change position on the march and knock against the legs on the run, often throwing the men down; during the ascent and descent of hills they pull the men back; when lying down the soldier must manipulate his clothing bag, which impedes him from finding an easy position; when rising he has to gather up and refasten the clothing bag, which has turned to one side; when he creeps it drags on the ground and is caught by objects on the road.

The disadvantages and inadequateness of our equipment were amply demonstrated in the late war. When ascending

the hills, even a lightly dressed and equipped officer felt, when midway up, that his breath was going fast, and dark rings danced before his eyes from the strain and heat, while his muscles were trembling like overstrung wires. The heavily laden soldier could hardly push one foot in front of the other, and went on automatically, until he lay down exhausted, notwithstanding the whistling of bullets and the exhortations of his officers.

More than one soldier fell during such moments, struck down by the heat, with a blackened tongue and upturned eyes. And how could this have been helped? The last drop of water has been drained long ago and the battle does not wait. Thus they were left to die under the burning sun.

During the Liaoyang battles some of the troops which had not yet been entrained, lost in this manner on marches and countermarches more than half of their contingent. There were companies which reached their destination with only 15 men.

The Japanese, on the contrary, is an aristocrat in comparison with our soldier. He is comfortably and well dressed, goes into battle in light equipment, and is not burdened with all his belongings.

Later on, when going into battle, we began to take off our equipments, leaving them with the reserves or on the position. It was thought that after the battle the soldiers could come back and recover their possessions. But in battle it is not always possible to return to the place whence one has started, or to go where one desires, and a mass of soldiers' equipment was left on battle fields which fell into the hands of the Japanese after the retreat.

As a result, our soldiers were left with nothing but what they had on, and the most indispensable articles were lacking. Moreover, this throwing away of the equipment contributed not a little to exempt the soldier from his habitual care of government property, and a certain slackness was observed in its stead. As it was quite difficult to prove whether the soldier threw his equipment away or lost it, the company commander had a sore problem before him.

As a result, there was a great loss of material, but as it was clearly evident that it was impossible to fight in the equipment, to ascend the hills and to attack them under fire, it was

necessary for purely military reasons to be guided by other considerations.

ARMAMENT.

We shall say briefly that our rifle in the present campaign stood the test most excellently, in spite of the many unfavorable circumstances which we have already mentioned.

We had occasion more than once to prove its accuracy. Great rapidity of loading is not particularly needed at the present time, since the expenditure of cartridges is enormous any way. One of its defects is the frequent difficulty in opening and closing the breech. Sometimes the end of the bayonet grows crooked on account of the heat; the cause lies probably in the tempering of the steel. But as a thrusting weapon, our bayonet is superior to that of the Japanese—a broad, flat knife, demanding great force when delivering a blow. This is why the Japanese does not thrust but cuts.

The armament of the infantry officer does not play so important a rôle as that of the private. The officer needs no weapon at all when in position, as he wields only the weapon of command and his moral authority. But in attack and in reconnaissance the officer must likewise use weapons.

The officer is armed with the revolver and the *shashka* (infantry sword). But the revolver is good only for seven shots, and then grows useless. It is absolutely impossible to unload and load a revolver of modern model during minutes where seconds are precious. There remains only the *shashka*, and this is the only weapon available for the attack. But it is difficult to repulse a blow of the bayonet with a *shashka*, and therefore during bayonet charges the officer is poorly defended, if he has not had time to grasp a rifle.

SUPPLY OF THE TROOPS.

As far as we could judge personally, and according to what we heard from those serving in the active army, the supply of provisions to the troops is well organized. There was never any lack of meat; the cattle were large and fleshy; there was always a great variety and abundance of fruit and vegetables; fresh bread was always served and biscuits were used but rarely; almost exclusively when in position. Hot food was served every day, the field kitchens being of great

advantage. Each company had a wheeled field kitchen where the food was cooked on the march. On this account it was possible to serve hot food at the long halt, after which food was cooked for the bivouac. It is evident that the companies on arrival at the bivouac did not have to wait several hours for their meal, or go to sleep on empty stomachs. There were exceptions, when the condition of the roads did not allow the heavily loaded kitchen to move, but such care was taken to supply the troops with hot food that the kitchens even brought food to the positions at dusk or at day-break, or the men went in squads to get their dinner. It sometimes happened that the kitchens betrayed their whereabouts by noise or sparks, and artillery fire was opened against them. Thereupon the kitchens rushed away at a gallop and the company looked on wistfully at the disappearance of their dinner. More than one of these kitchens bore the marks of bullets.

Preserved food was likewise of great importance. With the unavoidable uniformity of food, they afford excellent variety to the campaign fare. All the preserved food of private Russian factories, as well as of governmental ones, proved of excellent flavor and quality. The officers bought as much as they could at every opportunity, and in positions where it was necessary to limit oneself to biscuits they were priceless. The privates appreciated them greatly, but as a can of preserved food formed the standard allowance they tried to buy them with their own money, although the price was rather high—about 1 ruble (51 cents) per can.

THE PSYCHOLOGICAL PHASE OF THE COMBAT.

Taking into consideration the most important phase of the combat, and yet the one that is least possible of direction and evaluation, i. e., *the morale*, we would like to give an idea of the psychological side of the modern *mise en scène* of battle.

Although the laws governing human nature have not altered, and, as before, the fear of death and the instinct of self-preservation speak loud at the sound of the first shot, the *mise en scène* of modern battle is undoubtedly different from the one which was presented even by our last war (Turkish), and gives a new picture of battle.

INVISIBILITY OF THE ENEMY.

The principal characteristic of modern battle fields is the invisibility of the enemy.

When I went into battle for the first time at Yentai I could determine the direction and position of the enemy only by the whistling of the bullets, although I was with my company under shrapnel and fierce rifle fire. When I reached the crest of the hill, I began to scan the horizon to see whence that hail of fire was showered upon us.

I looked in vain for traces of trenches or fortifications and expected to see somebody. I saw nothing and nobody. I was told but one thing before the battle: "Occupy the hill to the right."

Scanning the locality I saw at a distance of $1\frac{1}{2}$ verst (1,750 yards) a long wavy range on which it seemed that there was not a soul and yet it was from that point that the bullets were flying. We determined the approximate range of that hill and opened fire against it.

This invisibility brings about a sense of insecurity and irresolution. It often happened that a man passed several days on a position and was put *hors de combat* without having seen the enemy.

LONG RANGE OF EFFECTIVE FIRE.

Another peculiarity lies in the long distance at which the shots tell. A unit, separated from the enemy by a range of hills, begins to incur losses at a distance of several versts. Before that unit goes into battle, i. e., opens fire and can at least see the hills from which it is being fired at, it has already become somewhat disorganized materially and morally, and consequently can not go into battle perfectly fresh. It is sometimes necessary to remain for several hours under such preliminary fire, whence arises fatigue, both physical and moral, long before the period of actual combat.

DURATION OF MODERN BATTLES.

The duration of modern battles, sometimes reaching two weeks, imposes a terrible tension on the mind, and acts exhaustively upon the physical condition of the men. A great supply of moral and physical strength is needed to stand for several days uninterruptedly the conditions of life

in positions. The conditions of that life are such that one must fire, drink, eat, sleep, and die without knowing one minute's rest, by day under fire, and by night under the nervous strain of expecting a sudden attack at any moment, in utter darkness, sleepless, not being able to light even a cigarette without drawing a hail of bullets at each flash of the match.

Add to this constant losses in wounded and killed. The base of the hill in a few hours after the occupation of the position is covered with fresh burial mounds and their number grows with every day.

FIRST IMPRESSIONS IN BATTLE.

It is difficult to depict in words the impression made upon an inexperienced man by battle. The first projectile bursting alongside or the first bullet hurtling past awakens such varied feelings and impressions.

It is of the greatest importance to take oneself well in hand during the first moments of the fight. A great support is found in the consciousness of thousands of soldiers' eyes studying one's first steps, and that the authorities likewise examine the "new man." The soldiers look especially intently at the new commander and form their judgment of him on the spot (a very critical judgment). On the other hand, the newness of one's impressions helps to drown the inner voice apprising one of surrounding danger.

Modern rifle fire produces a strong impression; the air seems to be literally filled with bullets; their plaintive whistling pervades the atmosphere like a continuous moan, above, below, and everywhere.

As soon as the first shot is heard, the soldiers grow serious, take off their caps and cross themselves, all jokes and conversation ceases. At the given order all march bravely as during maneuvers.

The courage and calmness with which the soldiers go into battle produce a strong impression.

The infantry soon grows accustomed to rifle fire, but the artillery fire, especially the shells, produce a decided impression. It seems to me that this is not due so much to the losses inflicted by artillery as to the earsplitting noise produced by the explosion of the projectiles. The effect is

produced only on the ear, but it is strong. The shrapnel shells have a specially powerful effect upon the inexperienced, and the shrapnel upon those unaccustomed to battle. The young soldiers throw themselves face downward at each bursting of a shell. Thus the infantry, which suffers most from rifle fire, pays least attention to it; the artillerymen on the contrary are much impressed by rifle fire. This may be explained by the fact that the men are accustomed to their own arm. In addition to this, the whistling of the bullets also produces an impression upon a battery, because it notifies the artillerymen of the approach of the enemy and consequently of danger.

THE CONDUCT OF SOLDIERS IN BATTLE.

As a general rule our soldier in battle has an astoundingly simple and everyday demeanor. He who expects to see something out of the ordinary, something heroic on his face at these decisive moments, something picturesque and dramatic, is greatly mistaken. The soldier remains the same ordinary man as before, only his face is somewhat paler and its expression more concentrated and serious. His nervous and rapid firing betrays the inner struggle. It is at that moment that it is necessary to master the soldier's impressions and bring him to a normal condition, as far as this may be done in battle.

IMPORTANCE OF THE OFFICER IN MODERN BATTLE.

From the moment that the first shot is fired, the center of gravity of the unit rests upon the commander—the officer, and here is shown all the importance of the officer and all the enormous responsibility resting upon him.

THE BATTLE OF COMPANY COMMANDERS.

The worse the conditions of the fight, the fiercer the combat, the greater the losses, fatigue, tension, the strain upon nerves—the greater grows the importance of the officer and the result obtained by 150 to 200 men in battle depends upon the company commander. The present war may be called the war of company commanders. Each eyewitness of battle may confirm how continuously, how narrowly, the men watch their officer. These scores of lives depend upon his activity, his energy, and his personal courage. The soldiers

judge by their officer the condition of affairs, the greater or lesser danger, the success or failure. The authority of the officer may ascend to a great height, but it may likewise fall to rise no more. It is worst of all to show uncertainty and symptoms of fear. Such a commander loses control over his unit and it is impossible to guarantee that it will go bravely into battle.

The officer in battle must more than ever be a commander, and the discipline must be an iron one. Never does the importance of discipline tell so much as in combat. Woe to the unit which in time of peace did not become impregnated with the spirit of iron discipline. It will pay dearly for it in war.

We had occasion to notice how a resolute, imperious commanding shout acted in a marvelous, quieting way upon the men. It is very useful likewise to make remarks concerning the service alone. For example: "Why are the sights not set in that squad? Squad commander, what are you thinking about? Examine and correct immediately." If the commander is angry, reproves for neglect; this means that there is nothing unusual—that everything is going as it ought and that there is no cause for fear. The men grow calmer and forget that bullets are whistling around them, but endeavor to set the sights correctly, to take a better position for firing, and begin to aim.

During the rear-guard actions, after the Liaoyang retreat on August 22 and 23, the men, who had already suffered great losses, were exceedingly nervous, lying at night in position and awaiting the attack of the Japanese. It was the dead of night; the company was on the extreme flank, and the *mise en scène* within view of Liaoyang in flames was somber and depressing. The men opened fire from time to time, without command, a fierce and unreasoning fire, which only helped to strain still more their already unstrung nerves. These are the moments in which it is necessary to bring the men to their senses by a joke or a threat, forcing them to grow calm. But the threat must be serious and the men must feel that it will be executed if need be. Angry words and shouts can do nothing.

It must be owned that such a condition of mind among the soldiers is very rare. As a general thing, the calmness and nerves of the soldier are worthy of envy.

A FEW WORDS ABOUT OUR SOLDIER.

In describing the characteristics of the Russian soldier it is impossible to pass without remark the unswerving obedience with which he executes the most dangerous orders—such as secret, outpost, and sentinel duty. If the officer enjoys confidence and authority, if he takes good care that the soldier be fed well and on time, if he is interested in his personal needs, he may be sure that the company will not leave him in battle, will not go back upon him, but will go forward unanimously. As a general rule the soldier is rather hopeful. If he is well fed and has rested, his spirits are good.

The soldier in position will go to sleep at the first opportunity. It was a frequent occurrence during intervals of combat to hear the riflemen snore. The men sleep as soundly under the fiercest cannonade as if they were in their own houses.

During intervals of firing, and if the men are not fatigued, a lively talk is going on in the positions. The soldiers love to watch an artillery duel.

If our projectiles tell, satisfied, laudatory shouts are heard; if the Japanese hit the mark, the hardest epithets are hurled at them.

If there is the slightest possibility for doing so, the sharpshooter will boil water and make tea in his kettle. Our infantrymen have an abnormal liking for tea, and they find means of preparing it, even under fire, somewhere in rear of a rock or in a hole, and they always very amiably offer some to the officers, who must never refuse, for it hurts them. Moreover, no one and nowhere does a Russian refuse tea.

A soldier knows always how to take care of himself in difficult times. He can find fuel and bedding in a trice, and, if necessary, food. An officer, as far as these comforts are concerned, can never get lost with a soldier.

At the same time, the carelessness of our soldier is wonderful. He has to be looked after like a child. This was especially hard in the positions during the night. If the soldier did not fire, he slept. And it is not always safe to sleep at a distance of 300 to 400 paces from the enemy.

At any rate the soldier thinks that the company commander has to watch for him and that he does not need to bother.

In spite of warnings, of explanations why raw, dirty water should not be touched for drinking purposes or the unwholesome Chinese fruit and vegetables should not be eaten, in spite of dysentery, the soldier will drink out of a dirty pond and eat the vegetables and fruit. He will drink on the march the entire contents of his canteen from the beginning and then suffer from thirst. It is necessary to watch closely over the inviolable supply of provisions, for the soldier might, out of sheer ennui, eat it up after a good dinner. In short, he must be watched continually.

DIFFERENCE BETWEEN THE RANK AND FILE ON ACTIVE SERVICE AND THE OLD RESERVISTS.

It is impossible not to mark the great difference existing between the soldiers on active service, the young reservists, and men of the *opolchenie* (Landwehr) and the old reservists,

As good as is the first category as regards cheerfulness, endurance, unpretentiousness, and personal bravery, so is the second poor, presenting only negative qualities.

As soon as the old reservists come to the troop unit they begin to complain, and their pretensions are numberless.

Their complaints bear the character of ill-concealed dissatisfaction, almost irritation. As a general rule, these uncouth, heavy bearded men look discontented, are clumsy, slothful, and cowardly. Their propensities are anything but warlike; they like to sleep well, eat their fill, raise a fuss behind one's back, while in battle they are too quiet. In addition to this, forgetfulness of military service, their years, thoughts about their family—all these causes and aspirations are not those which inspire a man at the critical moment and prompt him to throw himself against the enemy's bayonets. On this account the old reservists are not the element necessary for the attack, reconnaissance, or patrol service, where élan and presence of mind are needed. They may be utilized, at best, for defensive action in positions. In course of time, having been in several battles, the reservists improve markedly, but this is not attained at once and rapidly, and until this is reached they are of but little use.

INFLUENCE OF FREQUENT CHANGES IN THE PERSONNEL OF OFFICERS AND MEN.

Frequent changes in the personnel of officers and men can not but influence the moral element of troops.

Thus, on September 29, at the attack of the Tumentzuling Pass by the Thirty-fourth Rifles Regiment, there remained only 2 officers in the ranks, and after Chentanpu, 4 of the new personnel; at Liaoyang about 40 per cent of the rank and file were put *hors de combat*, and at Chentanpu 75 per cent, and the regiment melted to 5 companies.

On account of such enormous losses, the newly appointed officers and newly arrived rank and file know each other but little or not at all. As soon as the company commander, taking advantage of an interval in military operations, has had time to learn to know his men, and these have grown accustomed to his requirements, the first battle changes everything as in a kaleidoscope. The inevitable consequence of all this is the breaking of the close organic unity of even parts of the company. This is why it is necessary, according to my opinion, to have a greater cadre in time of peace, in order that, notwithstanding the losses suffered, there should remain in the unit a sufficient number of old soldiers of the regiment to weld the newly arrived men into a solid body.

SPIRIT OF THE TROOPS AFTER LIAOYANG.

Notwithstanding various unfavorable conditions of actual war, it is impossible not to wonder at the marvelous *esprit* reigning among the troops after the retreat from Liaoyang. There was not even a shadow of the impression which ought to pervade a "defeated" army.

The retreat was made calmly, without haste and anxiety. When crossing the Liao River, the infantrymen began such a romping, pushing each other into the water, and splashing, that it was difficult to believe that the regiment was under fire the day before and lost during the preceding days about half of its contingent.

In bivouac the singers assembled, not by order of the officers, but by their own initiative. The regiment lived its ordinary everyday life, taking advantage of the interval between fighting to rest and recuperate. I can not pass on

without mentioning the especially lofty spirit of the Siberian regiments. The Siberians present a splendid warlike personnel, and earned an excellent reputation in the Far East. They have well deserved the name of "Siberian Guards."

THE INFLUENCE OF CONTINUOUS RETREAT.

There was something which invisibly but surely entered into the consciousness of the soldier and hovered like a spirit of darkness above the army, and this was the influence of continuous retreat after fierce fighting, in which long-awaited success was so near. But the mirage of victory again slipped out of reach of those who fought so indefatigably and obstinately, and again the hated command to retreat was heard. The knowledge that the fight would end in a retreat acted in a demoralizing way. I often heard the men ask each other in positions: "When is the order for retreat going to come?" This was asked without any *arrière pensée*, and only from a consciousness that this had been done before and was going to take place again.

Unfortunately it always happened so.

The opinion of impending retreat pervading the ranks was strengthened by the circumstance that, more than once, successful operations, ending in the taking of difficult positions and points, were followed by the order to retreat, and helped to instill into the minds of the soldiers the thought, "No matter, the order for retreat will be given."

The order to advance, issued on September 22, roused the greatest enthusiasm. All were lively and excitedly happy. At last the everlasting retreat had ended and the turn for advancing had come. None of the men were anxious at the thought that the advance would bring about a fierce, bloody battle. They marched bravely and surely. The consequences, unfortunately, did not justify this confidence and strengthen this élan.

DIFFERENCE BETWEEN THE RUSSIAN AND JAPANESE SOLDIER.

Generally speaking, it is impossible not to wonder at the stolidity of our soldier, who, notwithstanding a retreat of several months and fatal failures, maintained his capacity for fighting with astounding stubbornness, displaying marvelous cheerfulness, true courage, and bravery.

I witnessed how in one of the battles several of the men, after having had their wounds dressed, returned to the position of the company, refusing to go to the dressing station. I saw soldiers in the hospitals asking to be sent back to the colors when they had not yet entirely recovered from their wounds. One of the sergeants, a Siberian rifleman, while still limping on account of his wound, left the hospital in my presence. Upon my asking him why he would not wait for his entire recovery, he answered: "It is too dull here; I like it better in the company; it is gayer there."

The brilliant qualities of our soldier are best displayed in attack. A company charging with the bayonet may be called justly an invincible force. Our soldier uses his bayonet like a tremendous weapon, neither asking nor giving mercy. Rendering full justice to the Japanese soldier, it must be owned that our man is superior to him in bayonet attack because of the force and the élan of his blow, and will always be the victor. The Japanese differs from the Russian soldier in his fanaticism, hatred of the enemy instilled into him since childhood, adroitness and skill, his fighting with rage, sending a bullet into the back of a foe who has just shown him mercy, biting when taken prisoner. This is why our men do not show mercy in attack. Our men have no hatred of the enemy and not a shadow of fanaticism. The soldier is kind to the prisoner of war and treats him gladly to tea and cigarettes. The Japanese display, not only among the men, but also among the officers, a cruelty which does not exist in the Russians.

Eyewitnesses from among the Siberian officers have told me how Japanese officers shot down our wounded. The Japanese deem all means good to attain their aim, showing no mercy to their men or to ours. Firing against their own troops is evidently not an extreme measure, for it was noticed frequently.

The principal difference between the Japanese officers and men and ours is shown in the means of exciting the troops to battle. The Japanese officer walks in rear of the soldiers and drives them on with revolver and sword, while our officer rushes forward, shouting: "Follow me, brothers; don't give me up!" And the brothers do not give him up.

The Japanese likes ruses—without them he is not sure. Large and small ruses are met with at every step. The

Japanese were greatly assisted by their knowledge of the Russian language, which many of them possess perfectly. A well-trained ear knows how to detect the Japanese pronunciation, because they can not sound the letter *r*. The Japanese, for example, says not "Hurra," but "Houla;" not "papirossa," but "papilossa," like the Chinese. But it is not very distinct with all of them, and, moreover, it is easy to be deceived. Taking advantage of their knowledge of the Russian language, the Japanese used it successfully when the troops had not yet grown accustomed to their subterfuges. Thus, they often challenged the sentinels in Russian, asked for the commander of posts, listened to conversations, dressed like Chinamen; in battle—in the dark—they gave orders in Russian. Thus, during the attack of the Tumentzuling Pass, when our company occupied the second trench and rushed forward with the bayonet, we heard distinctly from the trench: "Brothers, these are your men." The company stopped involuntarily, but the senior noncommissioned officer, following closely upon the company commander cried: "Don't believe them, brothers, they are Japanese; the ruffians!" and rushed on like a hawk. But this moment of procrastination cost the company two wounded officers and about ten men. The Japanese succeeded in discharging their rifles at close range. From the other trench the Japanese shouted: "Tenth company, to the rescue!" Farther on the Japanese cried: "Don't fire at your own men!" But for an answer they received a few volleys. The Siberian troops can distinguish them quite promptly, but the troops unaccustomed to their subterfuges do not.

I can not pass unnoticed the use of strong drink in the Japanese army as an incentive before battle.

Eyewitnesses, both officers and men, told me more than once that they found *hanshin* in the canteens of the prisoners of war and that Japanese soldiers were frequently taken prisoner in an intoxicated condition. The stupefying influence of *hanshin* is well known. Its effect is strong and of long duration, and it is not difficult to obtain that beverage, for there is not a *fanza* without it. There are likewise *hanshin* factories.

Such are, along broad lines, the characteristic features of the men of the two opponents. A great difference exists between them psychologically—one of them is deeply imbued with Christian ideas, while the other is purely pagan.

RELATIONS OF THE SOLDIERS TO THE EVENTS OF THE PRESENT WAR.

The sketch of the moral picture of our soldier would not be complete if we did not mention his relation to the events of the present war. The man who thinks that the soldier is ignorant of the conditions at the theater of war and that he does not rise above the affairs of his own company, knows nothing about the soldier. But in order to learn what he thinks about the events of the war and how he understands them, it is necessary to hear the soldiers' quiet talk among themselves on outpost duty, on the positions, or in bivouac; it may still better be observed in the hospital among the sick—there the soldier is more frank and open.

The reading of papers always elicits silent, concentrated attention, and even foreign news is perused. The papers are begged from the officers and are read as long as there remains a scrap of them.

The relations of foreign countries toward us are very correctly understood. They likewise fully comprehend our situation in the theater of war.

A very sane understanding of the situation was noticed in general.

I must say, in conclusion, that our soldier is excellent material because of his rare stolidity under circumstances against which scarcely any European army could have coped, by reason of his indomitable courage, endurance, unpretentiousness, and cheerfulness. Not only after Liaoyang, where victory was in our hands, but even after the February combats at Mukden, according to the words of those who have returned from those fights, there was neither despondency nor low-spiritedness in the army, not even a shadow of humiliation and loss of confidence in success, which it was so depressing to note in Russia.

When one leaves the confines of Manchuria and enters into Russia, the farther one goes the greater the anxiety and the more senseless the rumors, the more fantastic the so-called "facts," the more depressed and somber the attitude; and after having crossed the Ural, it is noticeable that the *De Profundis* has long ago been sung over our army of the Far East.

It is astounding that men who fight and die have kept intact their faith in Russia and in themselves, while those thousands of versts away have fallen into a state of incurable depression.

This condition of mind is, of course, brought about by the papers and letters sent to the army from home. Instead of supporting and encouraging those who sacrifice everything far from their mother country, everything that is dearest in life—and even life itself—and of sympathizing with them, nothing but reproaches, tardy complaints, accusations, and attacks are showered upon them.

Such relations render the difficult situation of the army still worse, and nevertheless victory is demanded of it. But each and every one who was in the active army, as an immediate participant in the fights and in life at the front, is filled with the deep conviction that, notwithstanding its terrible failures, our army is a powerful force which can and will lead Russia on its former path of victory and glory!

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